



Artemisia annua as a self-reliant treatment for malaria in developing countries

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Abstract:

Malaria is a vector-borne infectious disease caused by the protozoan *Plasmodium* parasites. Each year, it causes disease in approximately 515 million people and kills between one and three million people, the majority of whom are young children in sub-Saharan Africa. It is widespread in tropical and subtropical regions, including parts of the Americas, Asia, and Africa. Due to climate change and the gradual warming of the temperate regions the future distribution of the malaria disease might include regions which are today seen as safe. Currently, malaria control requires an integrated approach comprising of mainly prevention, including vector control and the use of effective prophylactic medicines, and treatment of infected patients with antimalarials. The antimalarial chloroquine, which was in the past a mainstay of malaria control, is now ineffective in most malaria areas and resistance to other antimalarials is also increasing rapidly. The discovery and development of artemisinins from *Artemisia annua* have provided a new class of highly effective antimalarials. ACTs are now generally considered as the best current treatment for uncomplicated *Plasmodium falciparum* malaria. This review gives a short history of the malaria disease, the people forming a high risk group and the botanical aspects of *A. annua*. Furthermore the review provides an insight in the use of ART and its derivatives for the treatment of malaria. Its mechanism of action and kinetics will be described as well as the possibilities for a self-reliant treatment will be revealed. This self-reliant treatment includes the local production practices of *A. annua* followed by the possibilities for using traditional prepared teas from *A. annua* as an effective treatment for malaria. Finally, HMM will be described and the advantages and disadvantages discussed.

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Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Temperature, Unspecified Exposure

Temperature: Fluctuations

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

Climate Change and Human Health Literature Portal



resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease, Morbidity/Mortality

Infectious Disease: Vectorborne Disease

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content